

WEEKLY BULLETIN



CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH

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Editor

EPIDEMIOLOGY OF TUBERCULOSIS

With each succeeding year, the epidemiology of tuberculosis gains added importance. The reduction in the morbidity and mortality of tuberculosis is most conspicuous, but it is still one of the most important of the communicable diseases. Many of the social factors that had to do with the spread of tuberculosis in past years have disappeared completely in many communities of California. There are still unfavorable social conditions on the fringes of the State that may have to do with the incidence of the disease but, in the main, they have been erased.

As the focus on tuberculosis becomes sharper, it is apparent that the medical and epidemiological aspects of the disease are of the greatest importance at this time. For that reason, the Bureau of Epidemiology of the State Department of Public Health has made a series of statistical tables covering the incidence of tuberculosis in California in 1941. Several of these tables are published in this issue of the Weekly Bulletin, and the remainder will be published in an early issue. It is hoped that through the publication of this material, institutions and physicians who report cases of tuberculosis will come to the realization that the data on the report cards are put to full use and contribute vastly to the control of the disease through the provision of knowledge relative to its epidemiology.

Unfortunately, essential data are missing from many of the cards received from public and private

hospitals and sanatoria as well as from private physicians and private clinics. If the required information were provided, the tables as presented here would be more comprehensive.

In 1941, 7,310 cases of tuberculosis were reported to the California State Department of Public Health. Of this number no data relative to the status of the infection were reported for 1,686 cases, 23 per cent of the total. Almost 35 per cent of the cases reported were in a far advanced stage; 26.4 per cent were moderately advanced; and 14.2 per cent were at a minimal status of infection.

Of the 7,310 cases reported last year, positive sputum examinations were made for 2,425 cases, most of which reports came from sanatoria or hospitals. Negative sputum was reported from 1,251 cases. More than half of all laboratory reports on tuberculosis cases reported came from cases confined in sanatoria or hospitals and more than one-third from patients in private homes.

Of the 7,310 cases of tuberculosis reported last year, 6,910 were pulmonary, 110 tuberculosis of the meninges, 84 were miliary, and on 206 reports the type of infection was not stated.

A study of cases reported last year by occupations shows that 14.9 per cent of all cases were in housewives; 12.1 per cent in laborers; 9.6 per cent in a miscellaneous group; and 8.5 per cent among students, except nursing and medical students. Clerical, sales and kindred workers accounted for 7.9 per cent of all cases reported.

**NEW CASES OF PULMONARY AND OTHER FORMS OF TUBERCULOSIS REPORTED
DURING 1941 REPORTING AGENCY BY STATUS OF INFECTION
AT TIME OF REPORT**

| Reporting agency | Minimal | Moderately advanced | Far advanced | Arrested* | Not stated | Total | | |
|-------------------------------------|---------|---------------------|--------------|-----------|------------|--------|------|--------|
| | | | | | | | Male | Female |
| Private physician or private clinic | 182 | 506 | 465 | 30 | 491 | 1674 | | |
| Health officer | 5 | 6 | 15 | 3 | 10 | 39 | | |
| Private sanatorium or hospital | 72 | 158 | 198 | 3 | 118 | 549 | | |
| Positive state laboratory follow-up | 4 | 28 | 23 | 2 | 23 | 80 | | |
| Public hospital or sanatorium | 330 | 477 | 951 | 16 | 632 | 2406 | | |
| Public clinic | 361 | 598 | 557 | 43 | 178 | 1737 | | |
| Coroner or death certificate | 1 | 8 | 109 | 1 | 8 | 127 | | |
| Federal agency | 64 | 95 | 187 | 13 | 197 | 556 | | |
| State agency | 21 | 54 | 34 | 3 | 29 | 141 | | |
| Other | | | | 1 | | 1 | | |
| Total | 1040 | 1930 | 2540 | 114 | 1686 | 7310 | | |
| Per cent of total | 14.23 | 26.40 | 34.75 | 1.56 | 23.06 | 100.00 | | |

* Entered as missed cases when cases were not previously reported, or when residence data indicated that cases were acquired in California and reported late.

**PULMONARY AND OTHER FORMS OF TUBERCULOSIS—1941
LABORATORY REPORT BY WHERE CONFINED AT TIME OF REPORT**

| Laboratory report | Sanatorium or hospital | Rest home | Private home | Apartment | Lodging house | Camp or trailer | Hotel | Other | Not stated | Total | | |
|--|------------------------|-----------|--------------|-----------|---------------|-----------------|-------|-------|------------|--------|------|--------|
| | | | | | | | | | | | Male | Female |
| Positive sputum | 1372 | 31 | 776 | 69 | 27 | 33 | 28 | 16 | 73 | 2425 | | |
| Negative sputum | 726 | 9 | 404 | 32 | 29 | 33 | 17 | 2 | 29 | 1251 | | |
| Positive animal inoculation and other positive tests | 29 | | 18 | | 2 | 1 | | 4 | 7 | 61 | | |
| Positive culture | 1 | | 1 | | | | | | | 2 | | |
| Positive spinal fluid | 2 | | 2 | | | | | | | 4 | | |
| Autopsy | 39 | 1 | 16 | | 2 | | 7 | | 10 | 75 | | |
| Positive pathological sections* | 3 | | 1 | 1 | | | | | | 5 | | |
| Bacteriological work not stated, but includes other clinical tests | | | | | | | | | | | | |
| Total | 1611 | 28 | 1288 | 160 | 80 | 24 | 70 | 23 | 203 | 3487 | | |
| Per cent of total | 51.75 | .94 | 34.28 | 3.59 | 1.92 | .83 | 1.67 | .62 | 4.40 | 100.00 | | |

* Recorded separately after October, 1941.

**PULMONARY AND OTHER FORMS OF TUBERCULOSIS—1941
TYPE OF INFECTION BY INDIVIDUAL GROUPS**

| Major groups | Pulmonary | Miliary | Meninges | Lymphatic (Not primary) | Alimentary | Peritoneum | Genito-urinary | Bone and joint | Skin | Generalized (More than two types) | Other forms not specified or nonclassifiable | Total | | |
|------------------------|-----------|---------|----------|-------------------------|------------|------------|----------------|----------------|------|-----------------------------------|--|-------|--------|--------|
| | | | | | | | | | | | | | Male | Female |
| Pulmonary ¹ | 6643 | | | 23 | 17 | 14 | 28 | 37 | 9 | 27 | 17 | 95 | 6910 | |
| Miliary ² | 16 | 64 | | | | 1 | | | | 3 | | 84 | | |
| Meninges ³ | 13 | 11 | 73 | | 42 | 10 | 18 | 42 | 60 | 9 | 11 | 14 | | 110 |
| Other ⁴ | | | | | | | | | | | | | | 206 |
| Total | 6672 | 75 | 73 | 65 | 27 | 33 | 70 | 98 | 18 | 38 | 46 | 95 | 7310 | |
| Per cent of total | 91.27 | 1.03 | .99 | .89 | .37 | .45 | .96 | 1.34 | .25 | .52 | .63 | 1.30 | 100.00 | |

NOTE: Includes civilian reports only, does not include duplicates.

¹ Pulmonary cases are those with pulmonary tuberculosis and any other form of tuberculosis except miliary or meninges.

² Miliary cases are those with miliary tuberculosis and any other forms of tuberculosis except meninges.

³ Meninges cases represent those cases with meninges and any other form of tuberculosis.

⁴ Other cases represent any case of tuberculosis with the exception of pulmonary, miliary, or meninges.

**TUBERCULOSIS: PULMONARY AND OTHER FORMS—1941
OCCUPATIONS BY SEX**

| Occupations | Male | Female | Total | Totals by groups | Percent of total |
|---|------|--------|-------|------------------|------------------|
| Professional and semi-professional, unspecified | 92 | 27 | 119 | | |
| Dentists | 7 | | 7 | | |
| Physicians, surgeons, and medical students | 12 | 1 | 13 | | |
| Trained nurses and student nurses | 2 | 50 | 52 | | |
| Teachers and instructors | 12 | 23 | 35 | 226 | 3.09 |
| Farmers and farm managers | 71 | | 71 | 71 | .97 |
| Proprietors, managers, and public officials | 43 | 6 | 49 | 49 | .67 |
| Clerical, sales, and kindred workers, unspecified | 106 | 62 | 168 | | |
| Clerical workers specified | 79 | 101 | 180 | | |
| Salesmen and saleswomen | 205 | 24 | 229 | 577 | 7.89 |
| Craftsmen, foremen, kindred workers, unspecified | 319 | 6 | 325 | | |
| Stone cutters and carvers | 2 | | 2 | 327 | 4.47 |
| Operatives and kindred workers, unspecified | 268 | 25 | 293 | | |
| Filers, grinders, buffers of metal | 4 | 1 | 5 | | |
| Mine operatives and laborers (miners) | 64 | | 64 | | |
| Painters (working in shops) | 3 | | 3 | | |
| Welders and flame cutters | 10 | | 10 | | |
| Operatives in stone, clay, glass products | 15 | | 15 | | |
| Laundry workers ¹ | 17 | 7 | 24 | | |
| Cleaning and dyeing workers ² | 12 | 2 | 14 | | |
| Aviation industry workers ³ | 24 | 1 | 25 | 453 | 6.20 |
| Domestic service workers in private families | 9 | 87 | 96 | 96 | 1.31 |
| Protective service workers | 83 | | 83 | 83 | 1.14 |
| Service workers, except domestic and protective (unspecified) | 246 | 28 | 274 | | |
| Practical nurses, midwives | 1 | 5 | 6 | | |
| Waiters and waitresses | 34 | 53 | 87 | | |
| Attendants in hospitals and institutions | 11 | 3 | 14 | 381 | 5.21 |
| Farm laborers and foremen | 144 | 17 | 161 | | |
| Migratory farm laborers | 7 | 2 | 9 | 170 | 2.33 |
| Laborers, unspecified | 842 | 39 | 881 | | |
| Stone, clay, and glass products | 3 | | 3 | 884 | 12.09 |
| Public Emergency Work, unspecified | 3 | 15 | 18 | | |
| W.P.A. | 12 | 8 | 20 | | |
| C.C.C. | 9 | | 9 | 47 | .64 |
| Students, except nursing and medical | 272 | 348 | 620 | 620 | 8.49 |
| Unemployed, over 14 years of age | 120 | 32 | 152 | 152 | 2.08 |
| Non-classifiable | 49 | 2 | 51 | | |
| Inmates of state institutions ⁴ | 21 | 18 | 39 | 90 | 1.23 |
| Miscellaneous including retired, preschool and no occupation | 454 | 247 | 701 | 701 | 9.59 |
| Housewife | | 1089 | 1089 | 1089 | 14.90 |
| Not stated | 806 | 488 | 1294 | 1294 | 17.70 |
| Total | 4193 | 2817 | 7310 | 7310 | 100.00 |

¹ Added to occupation code March 1, 1941.

² Added to occupation code March 1, 1941.

³ Added to occupation code July 1, 1941.

⁴ Added to occupation code October 10, 1941.

"NEW KIND OF GAS GANGRENE IF MAGNESIUM ENTERS WOUNDS"

A new kind of gas gangrene threatens workers in America's war industries unless care is taken to guard open cuts and wounds from magnesium splinters and dust, it appears from a report by Dr. Carey P. McCord, of the medical department of Chrysler Corporation.

Metallic magnesium and some of its alloys, the newest widely used metal in war industries,

5,000 cases in 1939, according to reports received by the Chrysler Corporation's medical division.

The studies by Dr. McCord, Dr. Stuart F. Meek and Dr. Gordon C. Harrold, also of the corporation's medical department, are believed to be the first in the United States showing the danger of not cleaning out all metal particles or dust from a wound in which magnesium particles might be involved.

"Early in our investigation," Dr. McCord reported, "we found that rat wounds in which small particles of magnesium had been introduced, unlike those contaminated with most metals, glass and wood, promptly lead to hydrogen gas formation in the tissues. The quantity of gas we found to be extensive and if neglected probably would produce a condition akin to a chemical gas gangrene."

"In the presence of magnesium particles it was discovered that hydrogen was evolved from the fluids of the tissues themselves and if the metal was not immediately extracted, would form a gaseous tumor. Thus it would seem that injuries resulting from not cleaning all magnesium particles from wounds may be much more serious than ordinary industrial injuries.

"The danger of this effect of magnesium calls, in first place, for special preventive procedure against accidental injuries where magnesium particles might be involved, and in the second place, the availability of immediate proper medical care. The complete removal of all metallic magnesium apparently is vital."—Science News Letter.

UTAH ISSUES RULES FOR LABORATORY APPROVAL

The Utah State Board of Health has revised rules and regulations governing approval of the laboratories for serodiagnostic tests for syphilis under the provisions of the premarital law of that State. Under these regulations, approved laboratories beyond the borders of Utah shall be those of the official State health agencies in the various states of the United States and their official branches; laboratories of the United States Army, Navy, and the United States Public Health Service; the official laboratories of the District of Columbia; the official Provincial laboratories of the Dominion of Canada; and such municipal, private or institutional laboratories in the various States and the District of Columbia as may be approved by the official health agency of the States or of the District of Columbia under rules and regulations similar to those required in Utah.

California laboratories should note that when reports of the serological tests for syphilis from

municipal, private, or institutional laboratories outside of Utah are required for use in that State in connection with premarital or other laws, directors of such laboratories where the test is made must certify that the laboratory has received approval from the California State Department of Public Health and give the date of issuance of the certificate, which he shall certify has not expired or been revoked. If this certification does not appear on the certificate form, county clerks of Utah will not accept it.

COMPILING EMERGENCY ATTENDANCE REPORTS

At this season of the year the California State Department of Education requires the approval or disapproval of the State Department of Public Health on requests for emergency attendance when such requests are based upon epidemics of communicable diseases. This work must be completed within the next four weeks. Since the numbers of cases of reportable diseases recorded in California since January 1, 1942, exceeds all previous years (250,649), the clerical work involved in tabulating epidemics since July, 1941, by school districts, requires a large volume of work.

Health officers should note that in reports of epidemics of acute upper respiratory infections, only those cases reported to the health officer within 30 days of occurrence are accepted. Any health officer who may be holding such reports from districts that desire to request emergency consideration should forward such reports without delay. Since the appropriation of school funds is based upon daily attendance, the reporting of epidemics is a matter of vital importance in the maintenance of uninterrupted instruction in the public schools of the State.

"Science and learning are definitely internationalized, and whether we wish it or not an indelible pattern of unity has been woven into the society of mankind. An American soldier wounded on a battlefield in the Far East owes his life to the Japanese scientist, Kitasato, who isolated the bacillus of tetanus. A Russian soldier saved by a blood transfusion is indebted to Landsteiner, an Austrian. A German soldier is shielded from typhoid fever with the help of a Russian, Metchnikoff. A Dutch marine in the East Indies is protected from malaria because of the experiments of an Italian, Grassi; while a British aviator in North Africa escapes death from surgical infection because a Frenchman, Pasteur, and a German, Koch, elaborated a new technique. In peace and in war we are all of us the beneficiaries of contributions to knowledge made by every Nation in the world."—The 1941 Report of the Rockefeller Foundation.

MORBIDITY***Complete Reports for Certain Diseases Recorded for Week Ending June 13, 1942****Chickenpox**

1045 cases from the following counties: Alameda 123, Contra Costa 3, Fresno 23, Glenn 4, Imperial 1, Inyo 3, Kern 24, Kings 7, Los Angeles 307, Madera 6, Monterey 7, Orange 15, Placer 67, Riverside 21, Sacramento 23, San Bernardino 24, San Diego 66, San Francisco 174, San Joaquin 12, San Mateo 16, Santa Clara 36, Santa Cruz 7, Shasta 11, Sonoma 9, Stanislaus 1, Tulare 15, Tuolumne 1, Ventura 5, Yolo 1, Yuba 33.

German Measles

1263 cases from the following counties: Alameda 234, Butte 2, Colusa 1, Contra Costa 20, Fresno 10, Imperial 4, Kern 33, Kings 10, Los Angeles 280, Marin 21, Mariposa 2, Monterey 3, Orange 36, Riverside 52, Sacramento 16, San Bernardino 71, San Diego 99, San Francisco 177, San Joaquin 44, San Luis Obispo 1, San Mateo 28, Santa Barbara 4, Santa Clara 38, Santa Cruz 11, Solano 1, Sonoma 27, Stanislaus 1, Tulare 12, Ventura 2, Yolo 22, Yuba 1.

Measles

4177 cases from the following counties: Alameda 464, Butte 7, Colusa 11, Contra Costa 153, Eldorado 10, Fresno 62, Glenn 5, Imperial 21, Inyo 16, Kern 80, Los Angeles 1490, Madera 16, Marin 8, Merced 3, Monterey 14, Napa 11, Nevada 1, Orange 195, Placer 96, Riverside 111, Sacramento 49, San Bernardino 78, San Diego 339, San Francisco 216, San Joaquin 39, San Luis Obispo 6, San Mateo 79, Santa Barbara 38, Santa Clara 139, Santa Cruz 49, Shasta 208, Solano 28, Sonoma 62, Stanislaus 7, Sutter 2, Tehama 1, Tulare 33, Tuolumne 18, Ventura 9, Yolo 1, Yuba 2.

Mumps

1822 cases from the following counties: Alameda 177, Butte 1, Contra Costa 47, Fresno 97, Imperial 53, Inyo 2, Kern 23, Kings 10, Los Angeles 411, Madera 10, Marin 3, Monterey 14, Orange 58, Placer 64, Riverside 28, Sacramento 49, San Bernardino 51, San Diego 183, San Francisco 184, San Joaquin 154, San Mateo 19, Santa Barbara 3, Santa Clara 89, Santa Cruz 9, Shasta 18, Solano 1, Sonoma 25, Stanislaus 1, Sutter 1, Tehama 9, Tulare 7, Tuolumne 2, Ventura 9, Yolo 7, Yuba 3.

Scarlet Fever

86 cases from the following counties: Alameda 5, Butte 1, Contra Costa 3, Fresno 7, Inyo 1, Kern 3, Los Angeles 40, Marin 1, Monterey 1, Orange 3, Placer 2, Riverside 1, Sacramento 2, San Bernardino 2, San Diego 3, San Francisco 6, San Joaquin 1, San Mateo 1, Santa Clara 1, Santa Cruz 1, Sonoma 1.

Whooping Cough

301 cases from the following counties: Alameda 27, Contra Costa 3, Fresno 34, Kern 1, Los Angeles 58, Madera 1, Monterey 10, Orange 7, Placer 2, Riverside 12, Sacramento 47, San Bernardino 9, San Diego 8, San Francisco 19, San Joaquin 21, San Luis Obispo 3, Santa Clara 10, Santa Cruz 2, Shasta 5, Sonoma 5, Stanislaus 4, Sutter 3, Tulare 1, Ventura 5, Yolo 4.

Coccidioidal Granuloma

One case from Madera County.

Diphtheria

15 cases from the following counties: Imperial 1, Los Angeles 6, Sacramento 2, San Bernardino 1, San Diego 1, San Francisco 2, San Joaquin 1, Sonoma 1.

Dysentery (Bacillary)

6 cases from the following counties: Los Angeles 5, Sonoma 1.

Encephalitis (Epidemic)

2 cases from the following counties: Los Angeles 1, San Bernardino 1.

Epilepsy

34 cases from the following counties: Alameda 1, Los Angeles 27, Monterey 1, Placer 1, San Joaquin 1, Sonoma 2, Yuba 1.

Food Poisoning

5 cases from Fresno County.

Influenza

78 cases reported in the State.

Jaundice (Epidemic)

One case from Los Angeles County.

Leprosy

2 cases from the following counties: Fresno 1, San Francisco 1.

* Data regarding the other reportable diseases not listed herein, may be obtained upon request.

Meningitis (Epidemic)

3 cases from the following counties: Alameda 1, Los Angeles 2.

Paratyphoid Fever

2 cases from the following counties: Alameda 1, Sonoma 1.

Poliomyelitis

One case from San Diego County.

Rabies (Animal)

7 cases from the following counties: Los Angeles 6, Tulare 1.

Rheumatic Fever

8 cases from the following counties: Los Angeles 7, Ventura 1.

Tetanus

One case from Los Angeles County.

Typhoid Fever

2 cases from the following counties: Kern 1, San Diego 1.

Typhus Fever

2 cases from the following counties: Los Angeles 1, San Diego 1.

Undulant Fever

4 cases from the following counties: Los Angeles 2, Riverside 1, San Bernardino 1.

The California State Department of Public Health is proud of the members of its staff who have entered the armed forces of the United States. It is with a sense of great pride that the names of the following men who have entered such forces are listed here:

UNITED STATES NAVY

Lloyd P. Bascom
Alcor Browne
O. L. Butterfield
James R. Keefer
Francis J. Lenehan
E. B. Mansfield
Don Roberts

UNITED STATES ARMY

Clark Beckwith
Jules Comroe, M.D.
Leon Comroe, M.D.
Joseph Copeland, M.D.
Sidney F. Dommes, Jr.
Robert Dyar, M.D.
Edward Hirschberg, M.D.
George Husser, M.D.
Edward Maher, M.D.
Julius R. Scholtz, M.D.
Joseph B. Smith

UNITED STATES MARINES

John Cruzan

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